

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Krukonis et al. Art Unit: 1791
Serial No.: 10/623,006 Examiner: Carlos N. Lopez
Filed: July 18, 2003 Customer No.: 21559
Confirmation No.: 4588
Title: REDUCTION OF CONSTITUENTS IN TOBACCO

REPLY TO OFFICE ACTION

In reply to the Office action that was mailed in connection with the above-captioned patent application on February 12, 2008, Applicants submit the following Remarks.

Claims 1-37 are pending. Claims 33-37 stand rejected for anticipation or obviousness over U.S. Patent Nos. 3,126,011 (the '011 patent) and 3,577,997 (the '997 patent). Claims 1-32 are allowed.

The Office has rejected claims 33-37 over the '011 and '997 patents because in its view "it is deemed that the end product [of the processes of claims 1-5] is not structurally distinguishable from that of [the] applied references." The Office supports its view by stating that the '011 and '997 patents disclose a tobacco having a reduced PAH (polycyclic aromatic hydrocarbon). Applicants disagree.

First, Applicants note that claims 33-37 are directed to tobacco produced by the methods of claims 1-5. The method of claim 2 results in the selective reduction of a secondary alkaloid relative to a primary alkaloid. Thus, tobacco produced by the method of claim 2 (recited in claim 34) has a reduced amount of a secondary alkaloid compared

to a primary alkaloid. The Office only alleges that the ‘011 and ‘997 patents disclose a tobacco having reduced PAH. Accordingly, the Office has failed to provide any argument or support for the rejection of claim 34, and the rejection should be withdrawn.

For claims 33 and 35-37, each covers tobaccos having a reduced amount of a PAH. Stated another way, each of the claimed tobaccos has been treated to reduce the amount of a substance that would otherwise be present.

In contrast, nothing in the ‘011 or ‘997 patents indicates that anything is removed from the tobacco. Instead, both patents are directed to processes in which a substance is added to tobacco to alter the products.

For example, the ‘011 patent states:

This invention relates to smoking compositions and to smoking articles including a novel class of inorganic material intimately associated with tobacco whereby the *pyrogenesis* of deleterious high-molecular weight substances normally encountered during the burning of tobacco particles is substantially reduced. (col. 1, ll. 11-16)

The reference further states: “Such deleterious polycyclic hydrocarbons are undoubtedly of pyrogenic origin *since they cannot be isolated from raw tobacco prior to pyrolysis thereof.*” (col. 1, ll. 36-39; emphasis added). Thus, the reference teaches the addition of an inorganic material to alter the products produced upon smoking the tobacco and not to change the content of the tobacco itself. The tobacco described in the ‘011 patent is therefore distinct from that instantly claimed, and the rejection should be withdrawn.

Similarly, the ‘997 patent claims:

1. A method of processing tobacco comprising treating the tobacco with a material including a mixture of citric acid and deuterium oxide in quantities

sufficient to *reduce the quantity of benzo(a)pyrene in smoke resulting from pyrolysis of the tobacco.* (emphasis added)

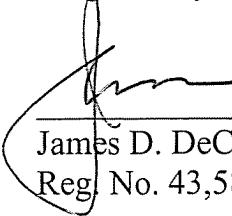
The method of the '997 patent is further described in Example 1, in which the mixture of deuterium oxide and citric acid is sprayed as particles onto tobacco. In the example, the reference explicitly states that "during the spraying technique, the particles should relatively quickly come in direct contact with the tobacco and impregnate the same." (col. 8, ll. 67-70). Like the '011 patent, the '997 patent describes the addition of a material, i.e., citric acid and deuterium oxide, to alter the products of tobacco pyrolysis and not the removal of a PAH or other constituent present in the tobacco itself. Thus, the tobacco of the '997 patent is also distinct from that claimed. This rejection should also be withdrawn.

CONCLUSION

Applicants submit that the claims are in condition for allowance, and such action is respectfully requested. If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 8/11/2008


James D. DeCamp, Ph.D.
Reg. No. 43,580

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045